

CORRES CONTROL
INCOMING LTR NO

00022 RF 97

DUE DATE
ACTION

States Government

10 JAN 97 5:50

REFTS-CC-1

Department of Energy

memorandum

Rocky Flats Field Office[illegible]

JAN 8 1997

EAI PN 05002

Operable Unit 5 No Further Remedial Action Determination

Joseph Legare, Acting Assistant Manager for Environmental Compliance, RFFO

I request your decision on whether to follow the No Action/No Further Action/No Further Remedial Action (NFA) Decision Criteria or the Action Levels and Standard Framework (ALF) in proceeding with Corrective Action Decision/Record of Decision (CAD/ROD) for Operable Unit (OU) 5. Based on the different evaluation criteria used in the NFA Decision Criteria and the ALF, a No Further Remedial Action is the preferred alternative under the NFA Decision Criteria, and, in contradiction, accelerated actions are required due to the Tier I action levels in ALF being exceeded. My recommendation is to follow the guidance in the NFA Decision Criteria.

A recent comparison between the approved Tier I and Tier II radionuclide soil action levels determined in the ALF and the radionuclide soil concentrations in the Resource Conservation and Recovery Act Facility Investigation/Remedial Investigation (RFI/RI) Report for OU 5 found exceedances of both Tier I and Tier II action levels in the current OU 5. The previous decision to complete documentation for a No Further Remedial Action CAD/ROD based on the Baseline Risk Assessment (BRA) results in the RFI/RI Report may be incorrect based on the requirement in the ALF to conduct an accelerated action if there is an exceedance of the Tier I action levels. It is imperative that a decision be made as to whether the NFA Decision Criteria or the ALF determines the action to be taken. Both are enforceable attachments to the Rocky Flats Cleanup Agreement (RFCA).

In the RFI/RI report, the BRA determined that the highest risk for the current OU 5 was 4E10-6 for a Future Onsite Office Worker. The No Further Remedial Action conclusion in the RFI/RI Report is based on this risk value and is supported by the NFA Decision Criteria in RFCA. In contrast, the Tier I/Tier II actions levels determined in the ALF are based on a hypothetical residential land use scenario for the Buffer Zone.

The different conclusions are a result of how Tier I/Tier II action levels were compared to the data in the RFI/RI Report. The BRA calculated risk using a 95% upper confidence limit (UCL) concentration as specified in the Environmental Protection Agency (EPA) guidance, *Calculating the Concentration Term for Risk Assessment*. The 95% UCL is calculated for a single Area Of Concern (AOC) in an OU, essentially producing an average for the entire AOC. A much lower and more generally representative concentration value was used for each area in the BRA as compared to the raw data concentrations exceeding the Tier I/Tier II action levels.

My recommendation to follow the guidance in the NFA decision criteria is based on the very conservative nature of the sub-surface soil action levels in the ALF and the past history of

CORRES. CONTROL	X	X
ADMIN RECORDING	X	
PATS/T130G		

Reviewed for Addressee
Corres Control RFP

1/9/97
DATE BY

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DOE ORDER # 5402



DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ADMIN RECORD
OU05-A-000703

Joseph Legare

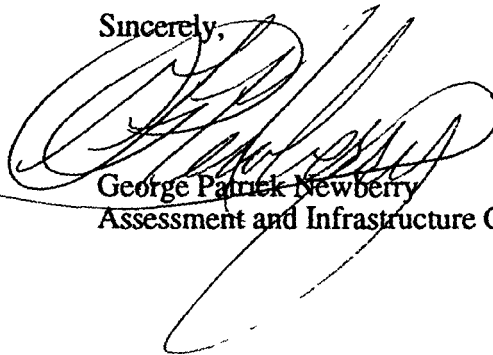
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acceptance of the 95% UCL for risk assessments by both the EPA and the Colorado Department of Public Health and Environment (CDPHE) In setting a precedent of comparing the Tier I/Tier II action levels to all environmental remediation data rather than following the NFA Decision Criteria, the Rocky Flats Environmental Technology Site may be required to perform a large number of unnecessary small accelerated actions which could be costly, time consuming, and no more protective of the public health than using the NFA Decision Criteria. In addition, to ensure that no potential hot spots are missed during a remedial investigation, the amount of sampling required to satisfy the EPA or CDPHE may increase to ensure that no small hot spots are missed within a remediation area.

Please contact me at extension 2351 if you have any questions or require further information on any of the points that I have made

Sincerely,



George Patrick Newberry
Assessment and Infrastructure Group

Attachment

cc w/Att.

R April, AMEC, RFFO
S Tower, AI, RFFO
R Tyler, ER/WM, RFFO
G Hill, RL, RFFO
J Kerridge, PLD, RFFO
F Lockhart, P&I, RFFO
S MacLeod, ER/WM, RFFO
S Slaten, RL, RFFO
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Administrative Record

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ATTACHMENT 1

Table 1 Concentrations from Section 4, Nature and Extent of Contamination, OU 5 RFI/RI Report and compared Tier I and Tier II Action Levels

Location	Chemical of Concern	Concentration in RFI/RI (pCi/g)	Tier I Action Level (pCi/g)	Tier II Action Level (pCi/g)
Surface Soils				
IHSS 133 4	U-238	209 28	586	103
Sub-surface Soils				
IHSS 133 1	U-238	1130	586	103
IHSS 133 2	U-238	1160	586	103
	U-235	37 86	135	24
IHSS 133 4	U-238	848	586	103
TDEM-2	U-238	933 04	586	103
	U-235	36 12	135	24